



## A review of the impacts of climate variability and change on aeroallergens and their associated effects

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**Author(s):** USEnvironmental Protection Agency (EPA)  
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### Abstract:

This report presents a survey of the current state of knowledge of the potential impacts of climate change and variability on aeroallergens -- pollen, mold, and indoor allergens—in the United States and the allergic diseases associated with them. Allergies are prevalent in the United States and impose substantial economic and quality-of-life burdens. A recent nationwide survey reported that 54.6 percent of people in the United States test positive for one or more allergens (American Academy of Allergy Asthma and Immunology [AAAAI], 1996–2005). Among specific allergens, dust mites, rye, ragweed, and cockroaches caused sensitization in approximately 25 percent of the population (Arbes et al., 2005).

**Source:** [http://ofmpub.epa.gov/eims/eimscomm.getfile?p\\_download\\_id=490474](http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=490474)

### Resource Description

#### Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Precipitation, Temperature

**Air Pollution:** Allergens

**Temperature:** Fluctuations

#### Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

#### Geographic Location:

resource focuses on specific location

Global or Unspecified

#### Health Impact:

specification of health effect or disease related to climate change exposure

Dermatological Effect, Respiratory Effect, Other Health Impact

# Climate Change and Human Health Literature Portal

**Respiratory Effect:** Asthma

**Other Health Impact:** allergic diseases

**Mitigation/Adaptation:** 

mitigation or adaptation strategy is a focus of resource

Adaptation

**Model/Methodology:** 

type of model used or methodology development is a focus of resource

Cost/Economic, Other Projection Model/Methodology

**Other Projection Model/Methodology:** discussion only

**Population of Concern:** A focus of content

**Population of Concern:** 

populations at particular risk or vulnerability to climate change impacts

Children

**Resource Type:** 

format or standard characteristic of resource

Review

**Timescale:** 

time period studied

Time Scale Unspecified

**Vulnerability/Impact Assessment:** 

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content